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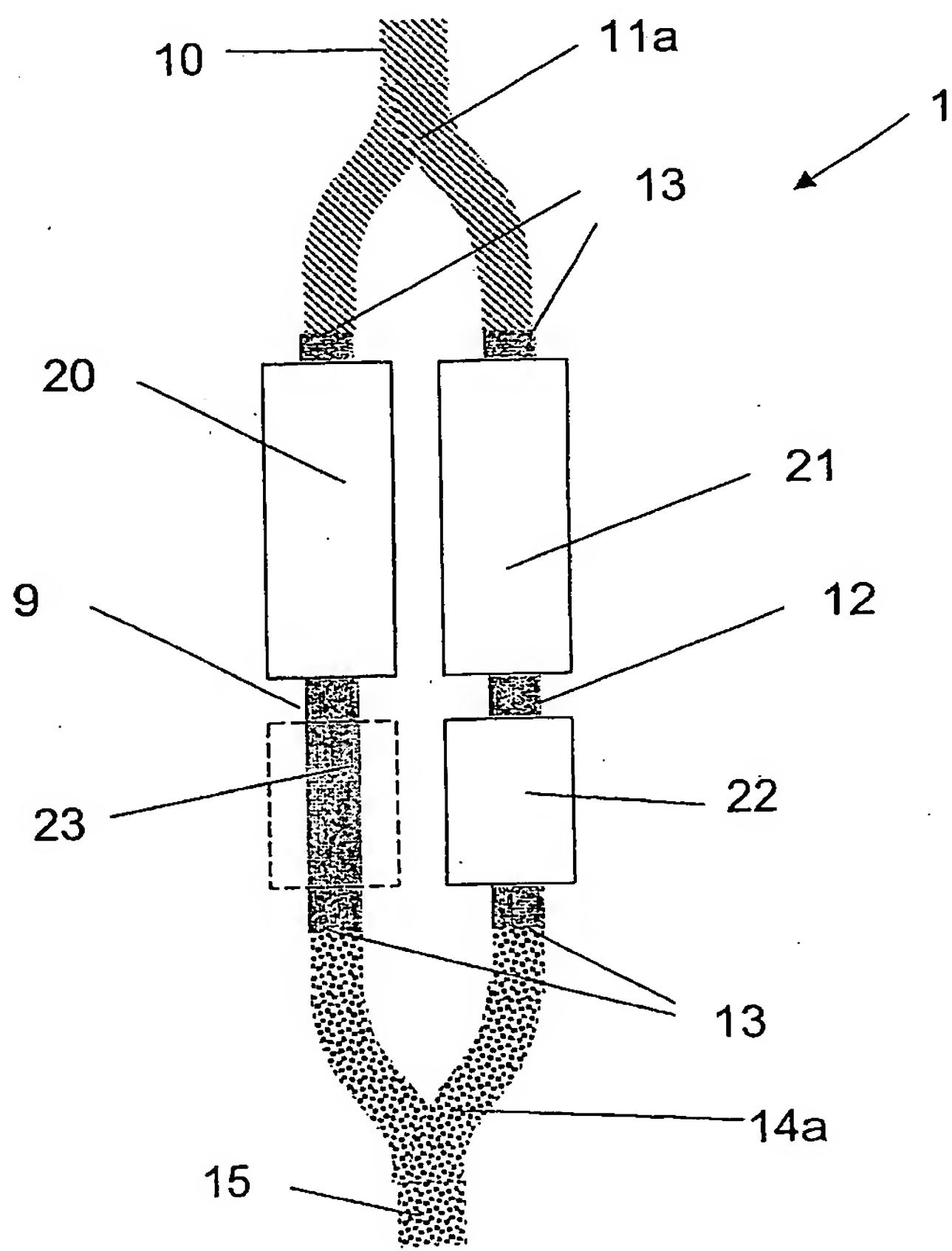
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(54) Title: OPTICAL MODULATOR



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(57) Abstract: An optical modulator (1) comprising an optical splitter (11a; 11b) for splitting an input light beam into a first and second light beam; a first and a second waveguide arm (9, 12) connected to said optical splitter (11a; 11b) for receiving and transmitting therethrough said first and second light beam, respectively, said waveguide arms (9, 12) each including a core region (32) comprising a group IV semiconductor material or a combination of group IV semiconductor materials; an optical combiner (14a; 14b) connected to said first and second waveguide arm (9, 12) for receiving said first and second light beam and combine them into an output light beam, a first and a second electrode structure (20, 21) associated with said first and second waveguide arm (9, 12), respectively; a driving circuit (80) for supplying voltage to said first and second electrode structure (20, 21), characterized in that said driving circuit (80) is adapted to supply a first modulation voltage superimposed to a first bias voltage to the first electrode structure (20) and a second modulation voltage superimposed to a second bias voltage to the second electrode structure (21).



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